

REMARKS/ARGUMENTS

Applicant thanks the Examiner for the very thorough consideration given the present application.

Claims 1-9 are now present in this application. Claims 1, 2 and 7 are independent. Claims 2, 4 and 7 have been amended. Reconsideration of this application, as amended, is respectfully requested.

Priority Under 35 U.S.C. § 119

The Examiner has not acknowledged Applicant's claim for foreign priority under 35 U.S.C. § 119, and receipt of the certified priority document. Acknowledgment thereby by the Examiner in the next Office Action is respectfully requested.

Information Disclosure Citation

Applicant thanks the Examiner for considering the reference supplied with the Information Disclosure Statement filed January 28, 2002, and for providing Applicant with an initialed copy of the PTO-1449 form filed therewith.

Drawings

Applicant has not received a Notice of Draftperson's Patent Drawing Review PTO-948 indicating whether or not the formal drawings have been

approved by the Draftsperson. Since no objection has been received, Applicant assumes that the drawings are acceptable and that no further action is necessary. Confirmation thereof in the next Office Action is respectfully requested.

Abstract of the Disclosure

Applicant has amended the Abstract of the Disclosure in order to place it in better form.

Specification Amendments

Applicant has amended the specification in order to correct minor typographical errors and to place the specification in better form.

Claim Objections

The Examiner has objected to claims 2-9 because of several informalities. In order to overcome this objection, Applicant has amended independent claims 2 and 7 in order to correct the deficiencies in claims 2-9 pointed out by the Examiner. Reconsideration and withdrawal of this objection are respectfully requested.

Claim Amendments

Applicant has amended the claims in order to correct minor typographical errors, and to place the claims in better form. The claim amendments are not being made in response to any statutory requirement for patentability, and have not been narrowed in scope. Instead, the claims have been amended merely to recite the subject matter therein more clearly.

Rejection Under 35 U.S.C. § 112, First Paragraph

Claims 2-9 stand rejected under 35 U.S.C. § 112, first paragraph. This rejection is respectfully traversed.

The Examiner states that the original specification and claims fail to teach how the stereoscopic image can be observed by simply having a variable color barrier.

In order to overcome this rejection, Applicant has amended claim 2 to recite a variable color barrier for selectively transmitting the picture on the display device in response to first and second voltages set to a different voltage level in a stereoscopic mode while transmitting said picture on the display device as it is in response to a third voltage other than said first and second voltages in a plane mode, said barrier being spaced from the display device by a predetermined distance and having a plurality of first color filters and a plurality of second color filters alternated with each other in a manner such that adjacent pixels have a complementary color relationship.

Applicant respectfully submits that the claims, as amended, are fully supported by and adequately described in the written description of the invention. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Claims 7-9 stand rejected under 35 U.S.C. § 112, first paragraph. This rejection is respectfully traversed.

The Examiner states that the specification and the claims fail to teach how the stereoscopic image can be observed by having a color barrier in the light scattering device. Claim 7, according to the Examiner, fails to disclose an operable device since the image displaying apparatus as described therein is not capable of providing a stereoscopic image display.

In order to overcome this rejection, Applicant has amended claim 7 to recite a color barrier having a first color filter and a second color filter alternated with each other in a manner such that adjacent pixels have a complementary color relationship; and a light-scattering device, being arranged between the display device and the color barrier, for transmitting an incident light as it is, in response to a first voltage in a stereoscopic mode and scattering said incident light in response to a second voltage other than said first voltage in a plane mode.

Applicant respectfully submits that the claims, as amended, are fully supported by and are adequately described in the written description of the

invention. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejections Under 35 U.S.C. § 103

Claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,315,377 to Isono et al. ("Isono"). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

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The Examiner states that Isono teaches a three-dimensional image display that is comprised of a liquid crystal display panel (46) to serve as a display device to display a picture according to image signals, and electrically generates parallax barrier strips on a parallax barrier panel (28). Further, the Examiner states that the size and the number of the barrier strips may be adjusted so that they interfere with the image light transmitted from the display panel (46) to display the image either in a two-dimensional mode or in a three-dimensional mode. The Applicant disagrees that an image can be displayed in a two-dimensional mode or in a three-dimensional mode.

In particular, Isono does not teach displaying video signals obtained by photographing an object at a different angle, and then viewing the displayed signals in either a plane mode or three-dimensional mode depending on mode selection corresponding to a viewer's choice. Rather, Isono relies on input

image signals that are received in either plane or three-dimensional at the outset, and subsequent switching of a display mode to select viewing of one signal or the other among an input signal or a three-dimensional signal. In other words, Isono does not teach a mere mode signal switch enabling a change of viewing mode for the currently input signal. In Isono, a mode must first be set to accommodate the signal received, and even after a signal and a mode is set, the parallax barrier must be adjusted in order to view an image in the selected mode. This requires a multiplicity of steps.

Therefore, Isono fails to teach or suggest a combination of elements in a method of displaying a multi-mode stereoscopic image, including displaying video signals obtained by photographing an object at a different angle on a display unit, and generating a mode signal for assigning a stereoscopic mode or a plane mode, as recited in independent claim 1. Reconsideration and withdrawal of this art ground of rejection is respectfully requested.

Claims 2-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,751,479 to Hamagishi et al. ("Hamagishi"). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

While not conceding to the appropriateness of the Examiner's rejection, the Applicant respectfully submits that independent claim 2 has been amended to recite a combination of elements in a multi-mode stereoscopic image

displaying apparatus, including a variable color barrier for selectively transmitting the picture on the display device in response to first and second voltages set to a different voltage level in a stereoscopic mode while transmitting said picture on the display device as it is in response to a third voltage other than said first and second voltages in a plane mode, said barrier being spaced from the display device by a predetermined distance and having a plurality of first color filters and a plurality of second color filters alternated with each other in a manner such that adjacent pixels have a complementary color relationship.

The Examiner states that Hamagishi teaches a three-dimensional display that is capable of being switched between stereoscopic mode and 2D display mode, wherein the apparatus is comprised of a liquid crystal display device. According to the Examiner, Hamagishi teaches that when the polymer dispersed liquid crystal panel is switched to ON, the color filter with the panel is switched to stereoscopic mode for directing and separating the image displayed on the liquid crystal display in such a way that the left eye image reaches the left eye of an observer and the right eye image reaches the right eye of the observer to create stereoscopic image display.

However, Hamagishi does not teach or suggest the variable color barrier, nor the plurality of color filters having the described alternate arrangement and spacing or the first, second and third voltage levels applied thereto.

Particularly, Hamagishi fails to teach or suggest a variable color barrier for selectively transmitting the picture on the display device in response to first and second voltages set to a different voltage level in a stereoscopic mode while transmitting said picture on the display device as it is in response to a third voltage other than said first and second voltages in a plane mode, said barrier being spaced from the display device by a predetermined distance and having a plurality of first color filters and a plurality of second color filters alternated with each other in a manner such that adjacent pixels have a complementary color relationship, as recited in independent claim 2, as amended, and similarly stated in independent claim 7, as amended. Reconsideration and withdrawal of this art ground of rejection are respectfully requested.

Claims 3-6 and 8-9 depend either directly or indirectly on independent claims 2 and 7. Since Hamagishi fails to teach or suggest the above-recited features of independent claims 2 and 7, Hamagishi cannot render claims 2-9 obvious to one of ordinary skill in the art. Reconsideration and withdrawal of this art ground of rejection are respectfully requested.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made

to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Percy L. Square, Reg. No. 51,084, at (703) 205-8034, in the Washington, D.C. area.

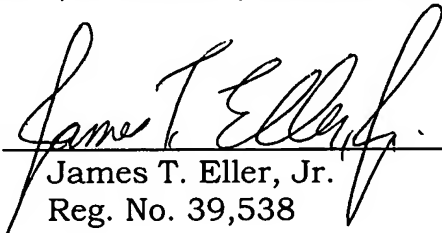
Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fee required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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